

## Utah Reclamation Mitigation & Conservation Commission 230 South 500 East Suite 230 Salt Lake City, UT 84102-2045 Phone: (801) 524-3146 – Fax: (801) 524-3148

COMMISSIONERS Brad T. Barber, Chair Don A. Christiansen

July 29, 2016

Mr. James Harris Utah Division of Water Quality P.O. Box 144870 Salt Lake City, Utah, 84114-4870

Subject:

Draft 2016 Integrated Report comment r.e. 303(d) listing of Sixth Water Creek as

impaired for dissolved selenium

Dear Mr. Harris,

The Utah Reclamation Mitigation and Conservation Commission (Commission) would like to comment on the Draft 2016 Integrated Report recently released by the Division of Water Quality (DWQ). Our comments specifically concern the 303(d) listing of "Sixth Water Creek and tributaries except Fifth Water and First Water Creeks and tributaries from confluence with Diamond Fork Creek to headwaters" as being impaired for dissolved selenium.

The Commission is an executive branch agency of the federal government authorized under the Central Utah Project Completion Act of 1992 (CUPCA, PL 102-575, as amended). Since 1997, the Commission has partnered with the Central Utah Water Conservancy District (District) to monitor water quality on Diamond Fork and Sixth Water Creeks in order to meet environmental commitments of the 1999 Diamond Fork System Final Environmental Impact Statement (FEIS) and Record of Decision. The District has traditionally shared the results of this monitoring with DWQ, including the results for STORET site 4995780 "Sixth Water at Strawberry Tunnel Outlet" upon which we presume the 2016 303(d) listing is based.

The selenium that is present in Sixth Water Creek is naturally occurring, the source being ground water ("tunnel make") that seeps into the Strawberry Tunnel and flows through the Strawberry Tunnel Outlet into Sixth Water Creek. The flow of tunnel make is approximately 5-7 cubic feet per second (cfs). Strawberry Reservoir water deliveries made through the Strawberry Tunnel typically provide an additional 20-25 cfs, and dilute the naturally-occurring selenium to levels that do not exceed the water quality standard.

The Strawberry Tunnel Outlet sample that was collected on October 6, 2009 was collected during a temporary tunnel shut down and consisted solely of tunnel make water. This flow

condition is rare and does not represent normal Diamond Fork System operating conditions. Flows are delivered via the Strawberry Tunnel to meet the minimum streamflow's required under the CUPCA. The tunnel is only shut down for brief timeframes (eg., 40 hours) for maintenance per a 5-7 year period, as committed to in the 1999 Diamond Fork System Final Supplement to the FEIS. A plot of flow releases through the Strawberry Tunnel for the 2008-2014 assessment period is shown in Figure 1 below. As evident in the plot, it is very rare for flow releases through the tunnel to drop below 18 cfs. A percentile analysis indicates that flow releases exceed 18 cfs more than 99% of the time. Therefore, we believe the October 6, 2009 sample should be considered non-representative and an "extreme event" under the DWQ's 303(d) assessment methods.

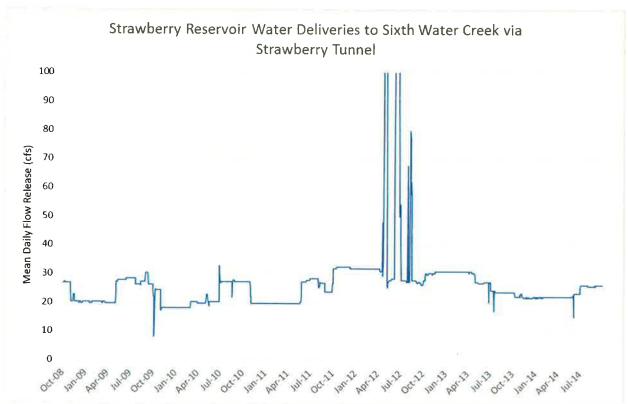


Figure 1. Flow releases from Strawberry Reservoir to Sixth Water Creek via Strawberry Tunnel, 2008-2014.

Other than the October 6, 2009 sample, there is only one exceedance of the chronic selenium standard of 4.6 ug/L in the dataset from May 2008 to November 2014. Because of these considerations, the Commission believes that Sixth Water Creek should not be included on the 303(d) list as being impaired for dissolved selenium.

The Commission, in cooperation with the District, Utah State University, and many other stakeholders, is currently conducting an in-stream flow study for the Diamond Fork Creek watershed. As part of this study, dissolved selenium is being monitored at Strawberry Tunnel Outlet and at two additional downstream sites on Sixth Water Creek. This data will help ensure that Sixth Water Creek will continue to meet its designated beneficial uses. For further

information and preliminary 2016 Sixth Water Creek selenium data please contact Mike Rau with the District at 801-221-0192 x210 or <a href="miker@cuwcd.com">miker@cuwcd.com</a>.

Sincerely,

Mark Holden

**Executive Director** 

cc: Mike Rau, Central Utah Water Conservancy District

Mark a. Holden

Sarah Johnson, Central Utah Water Conservancy District

Carl Adams, Utah Division of Water Quality

Reed Murray, U.S. Department of Interior, CUP Completion Act Office